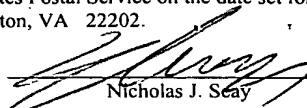


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Date of Signature and Deposit: March 19, 2003


Nicholas J. Seay

1632
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5/13/03

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: James A. Thomson

Date: March 19, 2003

Serial No.: 09/522,030

Group Art Unit: 1632

Filed: 03/09/2000

Examiner: Joseph T. Woitach

For: SERUM FREE CULTIVATION OF PRIMATE
EMBRYONIC STEM CELLS

File No.: 960296.96544

AMENDMENT

Commissioner For Patents
P O Box 2327
Arlington, VA 22202

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TECH CENTER 1600/2900

Dear Sir:

As a follow-up to the filing of a Request for Continued Examination in this patent application, and in partial response to the comments made by the Examiner at the time of issuing the Advisory Action After Final, the applicant herewith amends the application as follows:

In the Claims

Please amend Claims 1, 9, 14, and 17 as follows:

1. (Currently Amended Three Times) A method of culturing primate embryonic stem cells, comprising:

culturing the primate embryonic stem cells in a culture containing amino acids, vitamins, at least one transferrin or transferrin substitute, and at least one insulin or insulin substitute, the culture being essentially free of mammalian fetal serum and that contains exogenously supplied mammalian fibroblast growth factor that is supplied from a source other than just a fibroblast feeder layer.